

## Busy two weeks for Kenny in China, Japan



Getting into the armoury to buy textbooks last week was something of an endurance test, with lineups that stretched along Memorial Road from West Mall to Main Mall. But these two students, inching along with lawn chairs in tow, made the wait bearable by catching the last of the summer sunshine.

UBC president Dr. Douglas Kenny left last Friday (Sept. 17) for meetings in China and Japan with officials of universities with which UBC has student and faculty exchange programs.

While in China, President Kenny will visit Beijing at the request of China's minister of education, where he will explore increased university co-operation in matters of teaching and research with the ministry.

President Kenny said he was pleased to be able to respond to the invitations to visit the Far East because of the growing importance of educational exchanges and co-operative research among universities on the Pacific Rim.

UBC, he said, has an expanding teaching and research program on matters of mutual concern between Canada and China, which is carried out in a variety of faculties.

"In addition," he said, "we now have an attractive new Asian Centre, which serves as a focus for this expanding program. I expect UBC will play a significant role in the development of inter-university co-operation that will see an expanded exchange program involving Canadian and Asian scholars and graduate students." He will be discussing these matters with representatives of Beijing University, Qing-hua University and Peoples' University.

Dr. Kenny will also be visiting the city of Guangzhou (Canton) where he will discuss with officials of Zhongshan University the renewal and expansion of an existing exchange agreement.

Also visiting Zhongshan University the same week is UBC's men's basketball team, which was invited for a one-week stay in Canton for a series of matches against university and city teams. The basketball team will spend a second week in South Korea, at the invitation of the South Korean Basketball Association, for matches with corporation teams.

The second week of Dr. Kenny's trip will be spent in Japan for meetings with officials of the ministry of education in Tokyo, and for visits to the Universities of Tokyo and Tsukuba, with which UBC has exchange agreements.

He will discuss the present agreements with representatives from the two universities and explore possibilities for expanding these programs.

While in Japan, Dr. Kenny will attend a meeting in Hiroshima of the Pacific Circle Consortium, a major Pacific group with members from Japan, Canada, the United States, Australia and New Zealand. The group focuses on educational and research matters concerning Pacific Rim countries.

The Pacific Circle Consortium was established in 1977 as an official program of the Centre for Educational Research and Innovation of the Organization for Economic Co-operation and Development (OECD/CERI). The goal of the consortium is to improve international and intercultural understanding among the people and nations of the Pacific.

In Japan, President Kenny will also meet with officials of the Japan Foundation, which has contributed generously to UBC's Asian Centre.

## Ottawa funds chemical microscope

A breakthrough in research funding by Ottawa has resulted in the single largest grant for research equipment in UBC's history.

Prof. Laurance Hall of UBC's chemistry department has received a \$795,000 grant from the Natural Sciences and Engineering Research Council (NSERC) and the Medical Research Council (MRC) for work on a chemical microscope based on nuclear magnetic resonance spectroscopy.

NSERC president Mr. Gordon MacNabb told a UBC news conference last Thursday that the collaborative funding by the two councils was a "breakthrough in methods of funding by the agencies" and said he hoped research grants of this nature would continue so that "excellent research proposals such as Prof. Hall's continue to receive funding."

Prof. Hall and Dr. Subramaniam Sukumar, a UBC Killam Postdoctoral Fellow, are developing a chemical microscope that will be the first of its kind in Canada, and possibly the world.

The instrument has applications in a wide range of areas. It may be used by chemists to analyse the structure of new plastic molecules, by geologists and mining experts to determine the location and amount of petroleum in rock samples, by biologists and agricultural scientists to learn more about seed germination and to

improve crops, by pharmaceutical scientists to study the distribution and metabolism of drugs in the body, and by engineers, physicists and biologists who want to know

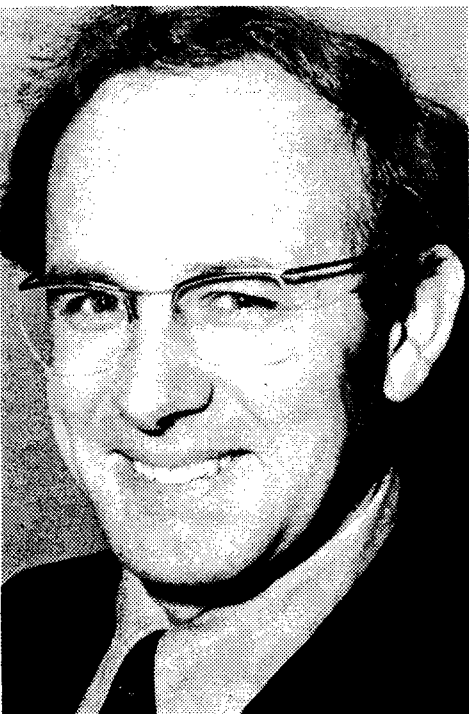
how liquids move — whether it be blood through capillaries or the flow of oil between two metal surfaces.

The NMR chemical microscope will allow the biochemistry of the body to be studied at a microscopic level without disturbing the body or removing samples from it. It will be possible to detect biochemical occurrences without any pain or discomfort to patients, while they are conscious and alert.

"The essence of nuclear magnetic resonance," explains Prof. Hall, "is that the nuclei of some atoms are 'magnetic' — they behave like a compass needle and point towards a magnet placed nearby. For example, the protons in the nuclei of atoms in a sample of water tend to point in a certain direction when the sample is placed in the hollow of a cylindrical magnet."

"Once the nuclei in the water are lined up in a particular direction inside the magnet, their direction can be changed by beaming a particular radio frequency signal or resonance from the nuclei. This resonance can be detected by a radio frequency receiver, similar to a stereo receiver, and the signal can be displayed on a television screen as the nuclear magnetic resonance of the sample."

Please turn to Page 2  
See MICROSCOPE



Laurance Hall

# GRANT DEADLINES

Faculty members wishing more information about the following research grants should consult the Research Administration Grant Deadlines circular which is available in departmental and faculty offices. If further information is required, call 228-3652 (external grants) or 228-5583 (internal grants).

Nov. 1

- Alberta Oil Sands Tech. and Res. — Research Contract.
- American Lung Association — Research Grant.
- AUCC: International Relations — Study Research in West Germany.
- Cdn. Ntl. Sportsmen's Fund — Postdoctoral Fellowships.
- Distilled Spirits Council of U.S. — Grants-in-Aid for Research.
- Hannah Institute — Fellowships.
- Hannah Institute — Grants-in-Aid.
- Health and Welfare: Family Planning Awards/Demonstrations.
- Hereditary Disease Foundation — Research Grant.
- Kidney Foundation of Canada — National Fellowship Program.
- MRC: Awards Program — Research Professorship.
- MRC: Awards Program — Scientist Award.
- MRC: Grants Program — Grants-in-Aid.
- MRC: Grants Program — Major Equipment Grants.
- MRC: Grants Program — Maintenance Grants.
- NSERC: Individual Grants — Conference Grants.
- NSERC: Individual Grants — Equipment Grant.
- NSERC: Individual Grants — Grants for Scientific Publications.
- NSERC: Individual Grants — Individual Research.
- NSERC: Individual Grants — Infrastructure Grants.
- NSERC: Individual Grants — Intermediate and High Energy Physics.
- NSERC: Individual Grants — Team Research.
- NSERC: Major Equipment/Installation — Major Equipment Grant.

## Microscope

continued from page 1

Since atoms of different elements have individual magnetic resonance, the method can be used to identify the chemical properties of unknown samples.

Since 1978, two new methods have been developed which enable NMR to be used to locate the positions of chemical substances within an object.

One method provides information on the anatomy or structure of the body at a point in time. The second provides information on the biochemistry or functions of the body — chemical changes that take place over a period of time — for example, whether a kidney is functioning properly.

By combining what up until now have been two separate types of NMR measurement, the UBC chemical microscope will allow scientists and physicians to determine the biochemistry of a part of the body with much greater accuracy than is now possible.

Another major NMR machine is scheduled for the Health Sciences Centre Hospital on campus. It will be combined with two other imaging devices, the more conventional computer tomograph (CAT) and positron emission tomograph (PET) scanners.

The CAT scanner provides three-dimensional images of the entire body. About half a dozen hospitals in the province already have CAT scanners.

A PET scanner is now being built at the TRIUMF cyclotron project at UBC and will be moved to the Health Sciences Centre Hospital. There are two other PETs in Canada, at the Montreal Neurological Institute and at McMaster University in Hamilton. Neither is as powerful as the one being built at UBC.

- SSHRC: Intl Relations Division — Grants to Canadian Scholars to Lecture Abroad.
- SSHRC: Intl Relations Division — Travel to Intl Scholarly Conferences.
- University of British Columbia — UBC: Killam Senior Fellowship.
- U.S. Department of Health, Education and Welfare — NIH Grants to Foreign Institutions.
- Von Humboldt Fdn. (W. Germany) — Research Fellowship.
- World University Services — Awards to Foreign Nationals: Fellowships.

Nov. 5

- Science Council of B.C. — Research Grant.

Nov. 11

- NSERC: Fellowships Division — University Research Fellowships.

Nov. 15

- Canadian Fedn. of University Women — Graduate Fellowships for Women.
- Canadian Liver Foundation — Research Grant.
- Canadian Liver Foundation — Fellowship Program.
- Canadian Liver Foundation — Scholarship.
- Energy, Mines and Resources Canada — Research Agreements Program.
- Health and Welfare: Family Planning — Family Planning Research Grant.
- National Cancer Inst. of Canada — Career Award Appointments.
- National Cancer Inst. of Canada — Equipment Grant.
- National Cancer Inst. of Canada — Research Grant.
- National Cancer Inst. of Canada — Training and Study Awards.
- National Res. Council of Canada — France-Canada Exchange (Social Sc. and Human.).
- National Res. Council of Canada — France-Canada Exchange (Natural/Applied Sc.).
- SSHRC: Strategic Grants Division — Management Science: Doctoral Completion.
- SSHRC: Strategic Grants Division — Management Science: Reorientation Fellowship.
- SSHRC: Strategic Grants Division — Management Science: Research Workshop.

Nov. 16

- Lindbergh, Charles A. Fund — Lindbergh Grant.

Nov. 20

- Muscular Dystrophy Assn/Canada — Research Grant.

Nov. 30

- Cdn. Ntl. Sportsmen's Fund — Project Grants.
- Cdn. Ntl. Sportsmen's Fund — Research Grants.
- Lady Davis Fellowship Trust — Fellowships.
- Lady Davis Fellowship Trust — Visiting Professorships.
- North Atlantic Treaty Organization — International Collaborative Research.
- Spencer, Chris Foundation — Foundation Grants.
- Weizmann Inst. of Science — Charles H. Revson Career Development Chairs.

## Coach appointed for women's rowing

UBC's athletics department has announced the appointment of Drew Harrison as coach of the women's rowing team.

Mr. Harrison rowed for Syracuse University in the 1960s, and after graduation rowed for the Potomac Boat Club in Washington. He returned to Syracuse University in 1973 to coach the freshman crew. His crews have won the frosh International Rowing Association championship three times in the past six years and came a close second twice.

In 1981, he coached the lightweight U.S. national team and was involved in the U.S. Olympic fours program.

Mr. Harrison comes to UBC in a joint appointment with the Vancouver Rowing Club, where he will also coach the women's team.

# Sally Creighton dies; she trekked, taught

Kathleen Sally Creighton, a former member of UBC's English department who became one of Canada's best known radio and television writers and commentators after retiring from teaching in 1949, died in September at the age of 79.

Born in Ashcroft, B.C., Sally Creighton took part in the Great Trek of 1922, the student protest that led to the completion of UBC on its present site on Point Grey.

She graduated from UBC in 1923 with first class honors in English and history and the following year received her Master of Arts degree from the University of Toronto.

She then joined the UBC English department, where she taught until 1927, when she married John H. Creighton. Mrs. Creighton taught at the University of Toronto and with her husband at Bennington College, in Vermont, until 1938, when they both joined the UBC English department.

Mrs. Creighton retired from teaching in 1949 to begin her career as a radio script writer, a radio and TV commentator and the author of numerous magazine articles and reviews. Her husband continued to teach at UBC until his retirement in 1963. He died in 1977.

At UBC, Mrs. Creighton served for nine years on the UBC Senate and for a one-year term on the Board of Governors following her retirement from lecturing.

Mrs. Creighton is survived by her son, Denis, a UBC graduate in Arts and Law.

The death of Arthur Delamont, founder of the world famous Kitsilano Boys Band, on Sept. 11 at the age of 90, is going to leave a big gap in the UBC music scene.

Since 1936, the UBC Pep Band led by Mr. Delamont has enlivened campus football, hockey and major rugby games with musical selections before the game, at half-time and following scoring plays.

His last campus appearance was on Sept. 3, when he led the band at UBC's first home football game against the University of Manitoba.

The Pep Band is made up of alumni of the Kitsilano Boys Band, which Mr. Delamont founded in 1928. Not a few of them were wealthy retired lawyers and businessmen who used to show up in their

Cadillacs to play out of a sense of loyalty to their former leader, according to UBC athletic business manager Buzz Moore.

"The only pay they got was a hamburger or hot dog and a bottle of pop," Mr. Moore said. He said the University gave Mr. Delamont an honorarium of \$500 a year, which he used to buy instruments and music to play at UBC games.

Mr. Moore wouldn't hazard a guess about the future of the Pep Band. "We'll be talking to some of the members to see if it's possible for them to continue playing," he said.

## Senate backs new program in site planning

A two-year program leading to a Certificate in Site Planning was given academic approval by the UBC Senate Sept. 15.

It would be the only such program in British Columbia, providing specialized education in site planning for land surveyors and others with similar professional backgrounds.

The program would operate on a self-sustaining basis with costs recoverable from fees. Admission would be limited to 12 to 14 students annually.

The program has still to be considered by the Universities Council and the UBC Board of Governors.

At this same "academic approval" stage is a joint Medicine/Science program that would lead to a Bachelor of Science degree in pharmacology.

It was noted at Senate that in contrast to some European countries, relatively few North American universities have undergraduate programs in pharmacology. In Canada, such programs are offered only by the University of Toronto and the University of Western Ontario. As a consequence, there is a shortage of pharmacologists.

## Sir Rex Richards opens new Vancouver Institute series

Violence, music, the law of privacy, the future of Western Canada and truth in newspaper publishing are just a few of the topics that will be under discussion during the Vancouver Institute's 1982 fall series of free public lectures at the University of B.C.

Sir Rex Richards, former vice-chancellor of Oxford University and a pioneer in the field of nuclear magnetic resonance spectroscopy, will open the series on Sept. 25 with a lecture on "NMR: A New Window on the Human Body."

All Vancouver Institute lectures take place in Lecture Hall 2 of the Woodward Instructional Resources Centre on the UBC campus at 8:15 p.m.

The series continues until Nov. 27 with Mr. Gerald Haslam, publisher of The Province newspaper, giving the final lecture on "Newspaper Publishing: Truth or Profits?"

Here's a complete listing of the institute's fall series:

Sept. 25 — Sir Rex Richards, Merton College, Oxford University, on "NMR: A New Window on the Human Body."

Oct. 2 — Dr. L. Jolyon West, Psychiatry, U.C.L.A., on "Violence."

Oct. 9 — Prof. Melvin Calvin, Chemistry, University of California,

Berkeley, on "Energy: Growing and Engineering Hydrocarbons."

Oct. 16 — M. Jacques Hebert, president, Canada World Youth, Montreal, on "Canadian Youth and the Developing World."

Oct. 23 — Dr. Charles Rosen, pianist, New York, on "Rhythm and the Passage of Time in the 20th Century."

Oct. 30 — Dean Peter Burns, Law, University of B.C., on "The State of Privacy in Canada: Was Orwell Right?"

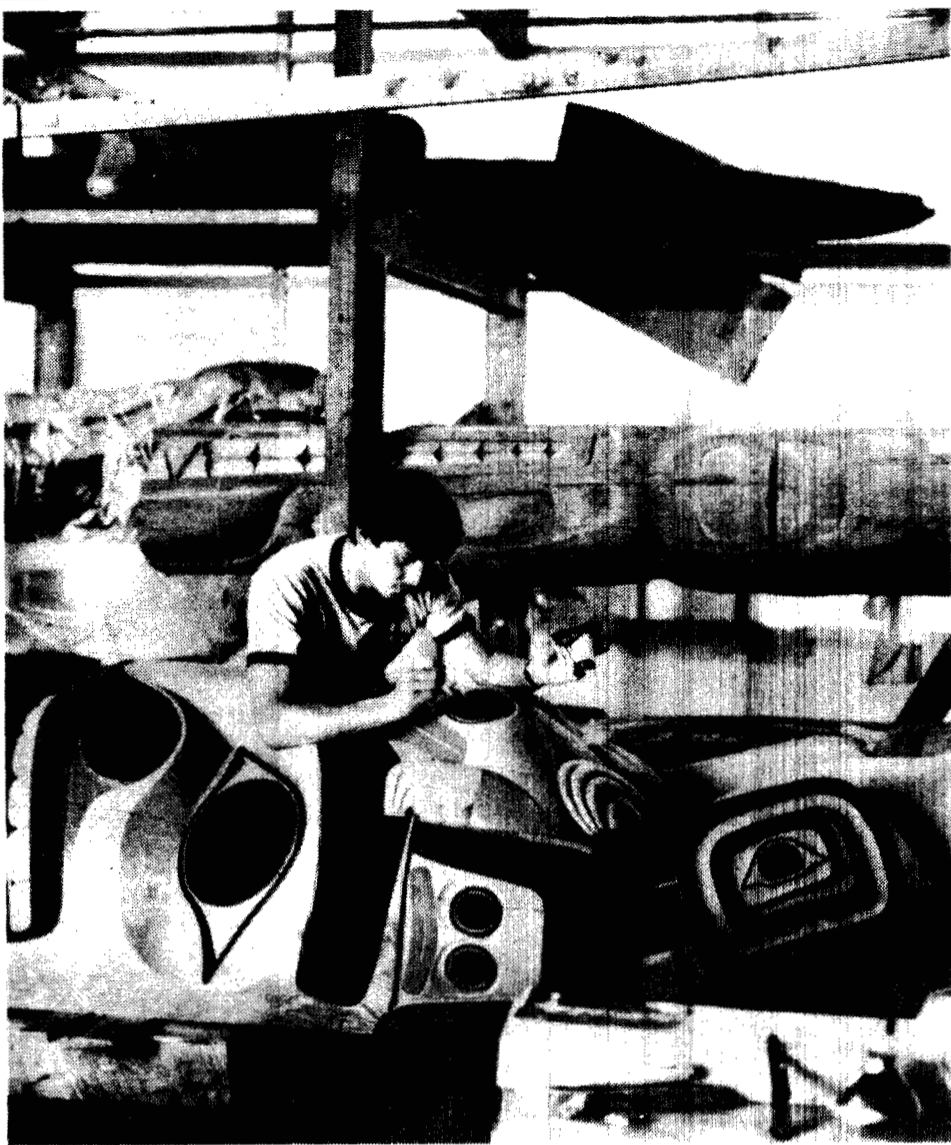
Nov. 6 — Dr. Clark Kerr, Institute of Industrial Relations, University of California, Berkeley, on "Academic Life in Poland, 1982: Industrial Society and the Universities."

Nov. 13 — Dr. Lewis Thomas, chancellor, Sloan-Kettering Cancer Centre, New York, on "Matters Unsettled by Science."

Nov. 20 — Dr. Peter Meekison, deputy minister, Federal and Intergovernmental Affairs, Alberta, on "Whither Western Canada?"

Nov. 27 — Mr. Gerald Haslam, publisher, The Province, on "Newspaper Publishing: Truth or Profits?"

A brochure listing Vancouver Institute fall lectures is available by calling 228-3131.



Totem pole carved by Haida artist Jim Hart will be raised at UBC's Museum of Anthropology on Oct. 2 in a ceremony rarely seen on the Lower Mainland.

## New pole ready for raising

UBC's Museum of Anthropology will be the site next week of one of the most spectacular ceremonies in native Indian culture.

On Saturday, Oct. 2, a totem pole carved by Haida artist Jim Hart will be raised in the museum's outdoor sculpture and Haida House complex. Several hundred people, including a large group of Haida Indians from the Queen Charlotte Islands, are expected to take part in the ceremony.

In addition to the raising of the totem pole, there will be performances of Indian music and dance and speeches by representatives of the Haida people, the Musqueam Indian Band and the University.

Members of the UBC community and

## Key role for UBC centre

The UBC Centre for Human Settlements has been commissioned to prepare the lead paper for the sixth session of the United Nations Commission on Human Settlements that will be held in Helsinki next May.

Theme of the May meeting will be 'Land for Human Settlements' with special reference to the UN's role in squatter communities.

The paper being prepared by the UBC centre will focus on national governmental policies and international co-operation. This major theme paper will be based on the work of two invitational seminars held on campus in November, 1981 and April, 1982 and on ongoing research.

Dr. Peter Oberlander, director of the centre, is in charge of the research project, with Mr. Peter Boothroyd, lecturer in the School of Community and Regional Planning, as the senior research associate.

The project is being funded by the UN Centre for Human Settlements, Nairobi, the Central Mortgage and Housing Corporation, the Canadian International Development Agency, and the University.

the public are invited to attend.

The totem pole carved by Jim Hart is a copy of a 19th century pole from the Haida village of Old Masset in the Queen Charlotte Islands, where the artist was born. The original was damaged in a severe storm and is in storage at the UBC Museum of Anthropology.

The festivities begin at noon on Saturday, when the pole will be carried from the carving shed in UBC's Totem Park to the museum. The main ceremony begins at 3 p.m.

More than a hundred people are needed to raise the totem pole, which is accomplished using cross braces and ropes. Claude Davidson, a Haida Indian from the Queen Charlotte Islands, will direct the participants in the pole-raising, a process which takes precise timing.

The pole is the first totem pole in the Masset style to be displayed at the UBC Museum of Anthropology.

## U of Toronto also seeking president

UBC isn't the only major Canadian university searching for a new president.

The University of Toronto is currently seeking a successor to President James Ham who, like UBC's President Douglas Kenny, steps down June 30, 1983.

President Ham's successor, who must be a Canadian citizen, is expected to take office on July 1, 1983.

The search committee at U of T invites nominations and applications for the position by Oct. 15. A full curriculum vitae should be submitted at the same time.

Documents should be sent to Dr. John G. Dimond, Secretary, Presidential Search Committee, Room 106, Simcoe Hall, University of Toronto, Toronto, Ont. M5S 1A1.

## Pat McGeer's leave extended by Board

Dr. Leslie Peterson, Q.C., chairman of UBC's Board of Governors, announced Friday that the Board has extended the leave of absence of Dr. Patrick McGeer from his duties at the University while holding political office during the next Legislature of British Columbia.

This decision was made on the

## Football 'Birds are riding high

The UBC Thunderbirds are undefeated at the midpoint of their Western Intercollegiate Football League schedule, but coach Frank Smith isn't about to start talking national championship.

"I think we've got a good football team," is about as far as Smith will go.

"I'm not surprised that we are doing so well, but we are taking each game as it comes. Right now, I'm not looking beyond our game here against Calgary."

Smith said his main concern is injuries to key players, or a letdown by the team after some relatively one-sided victories.

The Thunderbirds played three of their first four league games on the road, which gives them three of their final four at Thunderbird Stadium — starting Friday, Oct. 1, when the University of Calgary Dinosaurs are the visitors. The 'Birds are away Oct. 9, at the University of Manitoba, then are at home to the University of Alberta Oct. 15 and to the University of Saskatchewan Oct. 23. The two Friday games at Thunderbird Stadium start at 7:30 p.m., the Saturday game against Saskatchewan at 2 p.m.

In their four league games, the 'Birds have scored 143 points, their opponents only 34. They opened the season with a 37-17 win over Calgary, then dumped Manitoba 37-6, Alberta 32-4 and Saskatchewan 37-7.

If the Thunderbirds finish first or second in the WIFL, they'll be in the league playoff Nov. 6 at the home of the first-place team. The two Canadian semi-finals are Nov. 13 and the College Bowl, for the national crown, will be played Nov. 20 in Toronto.

## More union records given to UBC for safekeeping

The Special Collections Division of UBC's library is rapidly becoming a major repository for records and material that document the history of our province.

George Brandak of the Special Collections Division says that a number of unions and other organizations have donated material relating to their past activities to UBC's archives, in order to preserve the information and make it readily accessible to scholars, students and the public.

The latest example of this is a recent donation by the United Fishermen and Allied Workers' Union of material relating to the establishment and activities of the union. Some of the other organizations that have deposited their records at UBC include the International Union of Mine, Mill and Smelter Workers (Canada), the International Woodworkers of America (District No. 1), the International Association of Machinists and Aerospace Workers, Lodge 962, the Canadian Merchant Service Guild, the B.C. Federation of Labour, and the Vancouver Trades and Labour Council.

The material donated by the UFAWU includes executive board minutes, correspondence files, negotiations, briefs and reports on various topics, lists of

recommendation of the president after consultation with the Dean of Medicine and the Faculty Association, Dr. Peterson said.

Dr. McGeer, who is minister of universities, science and communications in the provincial government, is currently on leave of absence without pay as professor of neurological sciences in UBC's Faculty of Medicine.

Dr. Peterson said that Dr. McGeer had sought the extension of his leave because of the rule in the UBC Faculty Handbook which provides that a faculty member granted full-time leave while holding political office is expected to resign if his absence exceeds seven continuous years or two successive Legislatures.

This rule ensures that the University will have the opportunity to decide whether it is in the academic interest of the University to keep the position of the faculty member on political leave vacant beyond seven years or two Legislatures, as the case may be; it does not preclude the faculty member from applying for an extension of his leave or the University from granting that extension.

Dr. Peterson added that a significant factor in reaching the decision to extend Dr. McGeer's leave was his continuing scholarly activity. This activity, he said, has been amply demonstrated by his continuing association with his research laboratory in the Faculty of Medicine at UBC and his co-authorship of numerous papers resulting from research, which have appeared in academic journals.



Patrick McGeer

members, photographs and sound recordings. Also in the records is information about the union's involvement in issues such as air safety, conservation of fish and natural resources and opposition to nuclear testing. The union will continue to transfer at regular intervals to UBC any files that become inactive and are deemed to be of historic value.

All material from the UFAWU will be open to researchers and other members of the public who wish to view the records, with the exception of the general executive board minutes, which are restricted for a 20-year period.

"The restriction of portions of material isn't unusual," says Mr. Brandak, "since a lot of the information in the minutes relates to projects that are currently being carried out. Researchers can gain access to the minutes, however, if they obtain written permission from the president of the UFAWU or a designate."

"The acquisition by Special Collections of the UFAWU records and those of other organizations is valuable for two reasons," adds Mr. Brandak. "Not only do they provide important information about B.C.'s resources and industries individually, but they present a historical view of the province as a whole."

# Keeping fit is a serious business in China

Dr. Eric Broom, as associate professor of comparative sport studies in UBC's School of Physical Education and Recreation, conducted a three-week study program of sport and recreational facilities and practices in China this summer.

The study was arranged in conjunction with UBC's Directed Study Abroad Program and included professional and cultural visits in Beijing, Xian, Shanghai and surrounding areas.

Dr. Broom spoke with UBC Reports about some of his impressions of sport and recreation in China:

"In China, health, physical culture and sport are regarded as interdependent components of an overall system, in similar fashion to the Soviet system upon which it is modelled.

"Chairman Mao's dictum, 'Promote physical culture; build up the people's health' is applied at all stages of the life

cycle. In the school system, mass calisthenics for the total school population are performed daily before school starts, in addition to regular physical education classes. Workers have exercise breaks twice a day in offices, factories and fields. Most in evidence are the daily exercise sessions undertaken by a large proportion of the adult population either as individuals or in groups.

"This latter phenomenon may be seen

every day before work, between five and six o'clock in the morning. In communities both large and small, every park, piece of open ground and sidewalk or roadside becomes a gymnasium. Among those exercising one sees as many women as men, and as many elderly as young adults. Only a few joggers are seen, the vast majority engaging in Tai Chi, or a similar form of Chinese exercise. Soon after daybreak several thousand people were observed totally engrossed in many different forms of exercise on the famous Bund or waterfront in Shanghai.

"For recreation people walk or boat in the many peoples' parks, such as the former Summer Palace in Beijing. In the cool summer evenings large numbers of people were seen reading, playing cards and other similar games, and engaged in animated group discussions squatting at the roadsides. These activities continued long after dark by the light of street lights.

"In elite sport China adheres to the standard Socialist state model; early talent identification, spare time specialist sport schools and elite training centres. While China's re-entry into the Olympic Games in 1984, after an absence of over 30 years, is not expected to be as dramatic as that of the USSR in 1952 when they finished as overall points winner, it is expected to result in a major re-alignment of world sporting power.

"In 1981 and 1982 Chinese athletes have won all seven titles in the world table tennis championships; won the women's volleyball world title; won three titles at the World Cup diving championships; won four out of five events in the first world games badminton championships; placed both men's and women's teams in the first three in the world gymnastics championships; and, appearing for the first time in a world shooting competition emerged with the women's individual title in the skeet event. Clearly the formerly slumbering sporting giant is now awake.

"The cultural highlight of the study tour was probably the visit to the Qin Shi Huan Mausoleum, only recently opened to Western visitors. The tomb, more than two thousand years old, was constructed by 700,000 laborers and craftsmen over a fifty-year period and is guarded by thousands of life-size clay warriors. On the death of the Emperor 10,000 craftsmen were buried alive to prevent their skills being used elsewhere."

While in China, Dr. Broom met with the vice-president of the All-China Sports Federation and the director of the National Sports Institute. Among the topics discussed were competitions between Chinese and Canadian teams, enrolment of Chinese sports students at UBC, faculty and student exchanges, and the possibility of UBC becoming a training base for Chinese teams immediately prior to the World University Games in Edmonton in 1983 and the Olympic Games in Los Angeles in 1984.

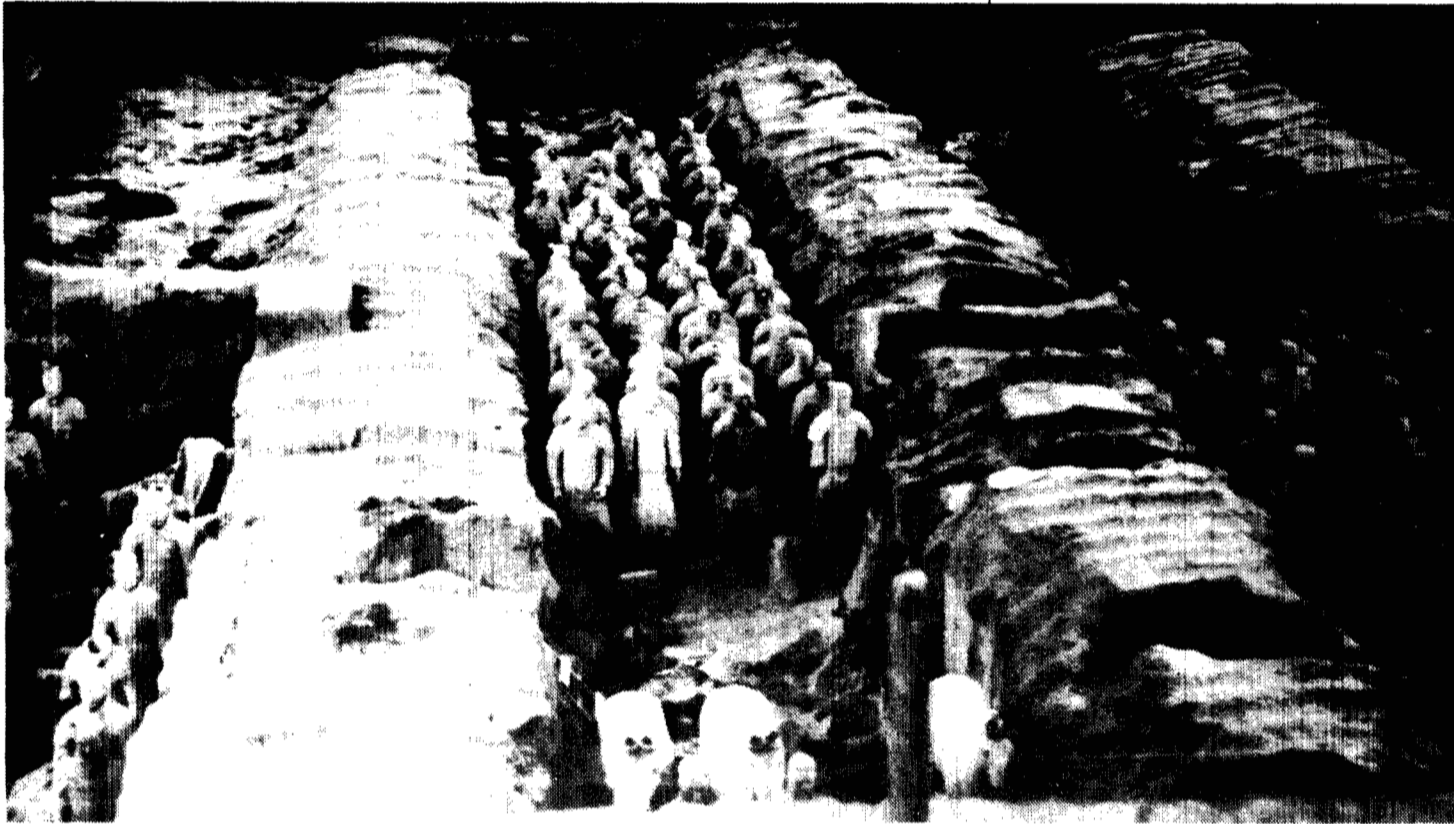
## Want to volunteer? New service helps

UBC's Student Counselling and Resources Centre is offering a new service called Volunteer Connections.

The service is available to all students, faculty and staff who are seeking volunteer work for career experience or personal development.

"The program is being operated on a volunteer basis by UBC students who trained this summer at the Vancouver Volunteer Centre," says counsellor Cheryl Brown. "Prospective volunteers can arrange an interview with one of the students, and the student will make agency contacts to find out what situations are available."

Drop by Room 200 of Brock Hall for more information, or call 228-3811.



Dr. Broom's trip to China this summer included a cultural visit to the Qin Shi Huan Mausoleum, which was built more than 2,000 years ago. The mausoleum was only recently opened to Western visitors.

## Light without heat carried via pipe

Lorne Whitehead, a research associate in UBC's physics department, has developed a system of lighting that will increase safety in hazardous work areas by bringing light into the area through a reflective pipe.

His 'light pipe,' which is based on a principle of physics called "total internal reflection," allows light from a source in one area to move through the pipe into another area, where wiring and heat from

a light source may not be wanted.

Light from any conventional source (Mr. Whitehead uses a 2,500-watt bulb) shines into one end of the pipe, and is reflected along its entire length. The pipe is a rectangular tube about 20 centimetres square made of commercial grade plexiglass a few millimetres thick.

"The plexiglass is molded on its outside surface with a series of corrugated prisms," says Mr. Whitehead. "It's these prisms that provide the total internal reflection."

Theoretically, the reflection could be 100 per cent, but because of scratches and other imperfections on the surface of the plexiglass, about 92 per cent of the light is reflected with each bounce.

Mr. Whitehead's pipe has many potential applications. One of the main markets for the invention will be office lighting.

"We've done some cost comparisons with conventional forms of lighting and we come out looking pretty good," says Mr. Whitehead. "The maintenance costs are lower with the light pipe, and because the pipe doesn't emit heat, the cost of air conditioning is also lower."

Mr. Whitehead's system will be installed in the atria of the new Insurance Corporation of B.C. building under construction in North Vancouver.

The light pipe can also be used in operating rooms, in areas with high ceilings where light bulbs are awkward to reach, and even for 'mood lighting' in restaurants, where the light can be easily changed from white to a wide variety of shades using an inexpensive filter.

Mr. Whitehead's invention took first place in the innovation category at a U.S. lighting competition last month. He received the Edwin Guth Memorial Lighting Design Special Citation at the Lighting Design Awards of the Illuminating Engineering Society in Atlanta, Georgia.

## Program breadth to be looked at by Senate

An ad hoc committee of Senate is going to look at UBC's undergraduate degree programs to make sure that they are broad enough in scope.

This was decided by Senate at its meeting Sept. 15, on a motion of Dr. Peter Suedfeld, head of the Department of Psychology.

In the preamble to his motion, Dr. Suedfeld said the University has an obligation to ensure that its graduates have the fundamentals of a liberal education gained by exposure to a broad range of disciplines and academic subjects. He said there is no mechanism now to ensure that majors and honors programs require an adequate degree of such breadth.

Carried almost unanimously was a motion that an ad hoc committee of Senate be "requested to enquire into and draw up recommendations as to minimum breadth requirements in the pre-baccalaureate programs of the University, and to report to Senate concerning their recommendations."

Chancellor J.V. Clyne, who spoke in support, said there tended today to be too much emphasis on job training and not enough on scholarship. He said the person with a good general education was the person most useful to society.

A second motion by Dr. Suedfeld, however, was defeated. This called for the Senate Curriculum Committee to suspend approval of new programs or major program changes pending the acceptance of recommendations as to minimal breadth requirements.

against this second motion, basically because it would be some time before the ad hoc committee could report to Senate upon recommended minimum requirements, which could mean new programs might be held up for a long period of time. Dean Cyril Finnegan (Science) noted that a joint Arts and Science program in meteorology would be ready for presentation to the Universities Council in January; under the second motion the program would be delayed for at least a year.

President Douglas Kenny, Senate chairman, urged the nominating committee to name members of the ad hoc committee as quickly as possible, and he asked that committee to carry out its work as quickly as possible.

## Open House planned by Health Service

A note to all students on campus who are accident prone or just plain curious. UBC's Student Health Service, located in Room M334 of the acute care unit, Health Sciences Centre Hospital, is holding an open house on Wednesday, Sept. 29.

The physicians, nurses and support staff who operate the Student Health Service will be on hand from 6 to 8 p.m. to show you around the clinic and answer any questions about the facility.

The radiology and rehabilitation departments in the acute care unit will be included on the tour, and a film, *Images of Life*, will be shown.

# CAMPUS PEOPLE

**Dr. Robert Hindmarch**, director of athletics and sports services at UBC, is the first recipient of the Gordon Jukes Award, an award given annually to individuals in recognition of meritorious service to hockey in Canada. The award is sponsored by the Canadian Amateur Hockey Association.

The Board of St. Mark's College, the Roman Catholic college affiliated with UBC, recently announced the appointment of **Father Robert Madden** as principal. Father Madden comes to St. Mark's from St. Michael's College at the University of Toronto, where he was an associate professor of English.

**Henry Wiens**, a technician in UBC's Department of Microbiology, retired in July after 47 years of service with the University. Mr. Wiens joined UBC in 1935 as a junior technician in Immunology and Bacteriology, and became an intermediate technician in the microbiology department in 1966.

**Diane Minshall** of the UBC Animal Care Centre has been given the Les Read Memorial Award by the Canadian Association for Laboratory Animal Science. Miss Minshall developed an inexpensive record card holder for use on animal cages, resulting in financial saving for the University.

**Prof. C.O. "Chuck" Brawner** of the Department of Mining and Mineral Process Engineering is the first president of the recently organized International Mine Water Association, which sponsors international conferences, publishes a technical journal and provides an international forum for mine dewatering drainage, slope stabilization using drainage, mine water supply from subsurface sources and groundwater research.

Associate professor emeritus **Donald McKay**, a member of the Department of Psychology from 1946 until his retirement in 1972, has contributed an interesting chapter on psychology at UBC to *History of Academic Psychology in Canada*, a new publication by C.J. Hogrefe Inc. of Toronto. Work in psychology at UBC was offered in the Department of Philosophy from 1915 to 1936, when it was renamed the Department of Philosophy and Psychology. The departments were separated in 1958. From 1945 until 1962, former UBC dean **Sperrin Chant** also served as head of the combined department and as head of psychology after its separation from philosophy.

**Dr. Vladimir Krajina**, honorary professor of Botany at UBC, is the 1982 winner of the Canadian Nature Federation's Douglas H. Pimlott Award, named for a noted wildlife biologist and conservationist.

The award is made to an individual who has made an outstanding contribution to Canadian conservation characterized by the completion of difficult conservation tasks of national significance.

Prof. Krajina, who was awarded an honorary degree at UBC's Spring Congregation, is internationally known for his pioneering work in the field of forest ecology and for the role he played in establishment of ecological reserves in B.C.

**Prof. David W. Boyd** of UBC's mathematics department gave one of eight invited one-hour addresses at the 86th summer meeting of the American Mathematical Society held at the University of Toronto Aug. 21-26.

## UBC diggers find gold in tomb

Few things in history have fired the human imagination more than gold. The ancients attributed magical properties to it, medieval alchemists attempted to create gold out of baser metals, it was a major spur in the first European explorations of the Western Hemisphere and the gold rushes of the 19th century gave rise to incredible tales of human endurance and hardship.

A little of the excitement that a gold discovery can engender was experienced this past summer by a UBC team of excavators, who for more than a decade have been working at a site on the south coast of Turkey with the aim of recreating the history and daily life of the town of Anemurium, which flourished in the third and fourth centuries AD.

The gold discovery took place in June during the excavation of the last of the four churches being investigated on the site. Prof. James Russell of UBC's Department of Classics and director of the project says there's good reason to believe that the building was the cathedral church of the town and was destroyed in an earthquake about the end of the sixth century.

When much of the rubble that had fallen in on the main part of the church was removed, the excavators found in one corner of the building a tomb about one metre high resting on the church floor. Workmen began the laborious job of sifting the contents of the tomb for artifacts and

skeletal remains.

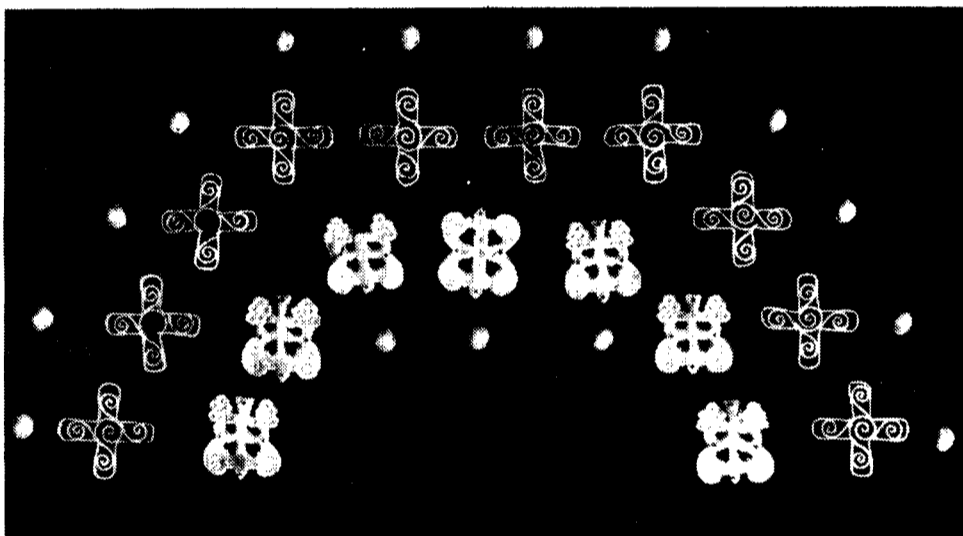
On the lowest level of the tomb, gold objects started to appear. In less than a day, a total of 34 items had been found — a pair of earrings and 32 beads, crosses and plaques which had originally been attached to fabric of gold thread to form a collar or necklace which decorated the first person buried in the tomb.

"It really is exciting to see gold objects appear during the sifting process," Prof. Russell said. "Most metal objects found on ancient sites are corroded or encrusted with rust, but gold comes up gleaming. All that's needed is a light brushing to restore its original brilliance."

One of the mysteries attached to the tomb in which the gold was found is the fact that the excavators found the remains of as many as 12 other bodies in it. There were at least four bodies on the lowest level of the tomb, including the one which was decorated with the gold necklace, and some eight other bodies on top of the original burial.

"Multiple burials are not at all common in this period in this part of the world," said Prof. Russell, "and I can't even hazard a guess as to why there were successive burials in the same tomb."

"I have no doubt that the person who wore the collar with the gold objects attached was a Christian because of the grave's location in the church and from the decoration of the jewellery with crosses and other Christian motifs."



*UBC archeologists discovered these 32 gold objects in June in a tomb in an ancient church they were excavating on the south coast of Turkey. The objects, 15 gold beads, 10 open-work crosses and seven plaques with motifs of dolphins and grapes, have been arranged in the way in which they might have been sewn on a collar or necklace of gold thread that decorated the first person buried in the tomb.*

## 5,000 coming to conference

Prof. James Russell, whose work as the leader of a major UBC archeological project in Turkey is described on this page, is on leave of absence from teaching duties in the Department of Classics this year to organize a major academic conference at UBC in 1983.

He's been appointed co-ordinator of the annual Learned Societies Conference, which will bring together some 5,000 Canadian university teachers and other interested persons representing more than 60 academic disciplines, primarily in the Faculties of Arts, Education, Law and Commerce and Business Administration.

Almost every major UBC building as well as all campus residence accommodation has been reserved for the meetings, which begin on May 29 and continue until June 8, 1983.

Not all the academic organizations will meet at the same time during that period, however. Each will meet for periods ranging from two to four days.

A national planning meeting for the conference scheduled for Oct. 7 and 8 will bring together the program chairpersons and local UBC representatives for each of the societies taking part in the 1983 conference. The conference business meeting is scheduled for 9 a.m. on Oct. 8

in UBC's Asian Centre.

Prof. Russell has an office (Room 205) in the old Home Economics Building, which has temporarily been renamed the Physics-Chemistry Annex, at the corner of University Boulevard and East Mall. His telephone number is 228-3422.



James Russell

Paradoxically, the gold objects will be of little value in furthering the main objective of the archeological team, which is to recreate the history of Anemurium from the first through the seven centuries AD.

"There's a popular misconception that modern archeologists set out to find gold and other valuable objects," Prof. Russell said. "The reality is that if one wants to reconstruct the history of a town like Anemurium, it's the humble objects like lamps, pots, copper coins and belt buckles that are used for accurate dating, first because there is an adequate number of samples of each of these artifacts and, second, because changes in style and decoration permit us to assign each to a specific period of time."

"On the other hand, valuables like the gold objects we found are unique. They were made for a specific individual at a specific point in time. We'll never be able to pinpoint when the gold objects were made because we are unlikely to find other closely similar examples for purposes of comparison."

After more than a decade of work on the site, the team has excavated a representative selection of buildings and tombs and is in a position to begin recreating the history of the city, which at its height housed some 10,000 people in the fourth century.

The one remaining major task on the site is the consolidation and preservation of floor mosaics and tomb paintings, for which Prof. Russell said he hopes for the collaboration of the Turkish Department of Antiquities.

About a dozen Canadian and European scholars will contribute material on the history of the city in the form of monographs that will appear over the next few years. Prof. Russell feels the final product will be a major contribution to the archeology and history of the period.

"A lot of scholarly effort has been put into the archeology of the classical Greek period on the one hand and the high Roman empire period on the other," he said. "The later period we are working in has been rather neglected; so our work should fill a major gap in the archeology of this period and this region."

Already the outlines of the city's history are forming in Prof. Russell's mind. From a thriving commercial and cultural centre in the third and fourth centuries, the city gradually deteriorated over a period of some 200 years until by about 600 AD the aqueducts which had supplied the city and its baths with water were no longer operating and the few remaining inhabitants were again drawing water from wells.

"It's quite clear that when the Arabs expanded on the perimeter of the Mediterranean basin in the seventh century, they were not taking over a prosperous or vigorous society," Prof. Russell said. "By that time, Anemurium was on the skids, partly, I suspect, as the result of plague and partly as the result of an economic decline."

The discovery of gold at Anemurium led to a flurry of local and national interest in Turkey during the summer. Local authorities placed a 24-hour armed guard on the site after the discovery, and members of the team found themselves being interviewed by reporters from national newspapers and radio stations.

And the discovery had one other immediate and positive benefit. Shortly after the gold was found, the site was visited by a three-star general from the Turkish air force, who was conducting an inspection nearby.

After Prof. Russell had given him a tour of the ancient city and shown him the gold objects, the general remarked that the three kilometres of road leading to the site were in very bad shape.

The next day, Prof. Russell said, an army of workmen, trucks, bulldozers and other machinery appeared and in quick time paved the bumpy road leading to the excavation site.

# Service comes first at International House

Off the top of your head, name 10 services available at UBC's International House.

Well, how about five?

If you really don't have a clear idea about what International House does, you're probably not alone. Director Rorri McBlane says that although International House has been operating on campus for well over 20 years now, a lot of people aren't aware of its many functions.

"Most people think of us in association with the recreational activities we organize, but we are primarily a service-oriented organization," says Mr. McBlane. "Our first responsibility is to provide help and guidance to international students, and social and recreational activities derive from that."

Help for the students begins even before they arrive at the University. When foreign students apply to UBC, International House sends them a package of information on topics ranging from housing in Vancouver, visas and other documents they will need, work permits, and information about the University itself.

"I think if a university accepts foreign students, as UBC does, it also has to accept the responsibility for making the transition into their new environment easier, and provide continuing support," says Mr. McBlane.

International House provides transportation from the airport for new students, accommodation for the first few nights and help finding permanent housing. During the last week of August, an orientation program is run to acquaint foreign students with the UBC campus and its services.

"We try to get the students as settled in as possible before the school year begins," Mr. McBlane says. "Foreign students really don't have any more problems than Canadian students, but what problems they do have are unique. They have to deal with such things as visa and work permit restrictions, and possibly a different educational system, which can be a bit confusing when you're also trying to adapt to a new culture."

"Even if their problems can't be taken care of out of our office, we can refer them to agencies both on and off campus that can help. But we try to focus on preventing problems rather than just solving them."

International House isn't just for foreign students, however. Its 900-person membership consists of students, faculty

and staff from UBC and members of the community as well as international students.

International House organizes activities such as language nights, where various languages are spoken and practised in an informal setting, cultural music and dance events, dinners, sports programs, camping trips and a wide range of other recreational activities designed to bring Canadians and students of other cultures together.

Also sponsored through International House are such services as the Language Bank, which provides translation assistance in over 50 languages and dialects. People registered in the Language Bank provide their time at no cost, for situations such as court appearances or the translation of important documents.

The Work and Study Abroad Information Library, another International House service, provides information about opportunities for students to participate in both short and long term programs overseas. In addition, International House facilitates the activities of CUSO, WUSC, Canadian Crossroads International and other volunteer organizations and associations.

Or if you're interested in knowing what is happening with foreign students in other universities, International House keeps in close communication with organizations involved with foreign students across Canada and the United States, through membership in the Canadian Bureau for International Education and the National Association for Foreign Student Affairs.

It's a pretty impressive list of programs and activities for an organization with only three staff members, including the director.

"We wouldn't be able to keep everything running without the help we get from volunteers from the community and UBC," says Mr. McBlane. "And my staff members, Grace Allen and Dan Kravinchuk, do an incredible amount of work."

But McBlane stresses that International House isn't just a 'shelter' for foreign students. "We do our best to give them help if they need it when they arrive and if problems arise later, but our goal is for them to fit in as easily as possible with other students on campus."

"If a student we've helped comes in to say hello, but is too busy to stay because he or she has plans somewhere else on campus, we feel we've done our job."



Director Rorri McBlane . . . . outside International House.

## Science in Society theme of Pugwash lecture series

The Student Pugwash Association at UBC has organized a series of free public lectures on the environment, under the general title "Science in Society: The Setting of Standards."

The 11-lecture series begins Sept. 28 and the final talk is on March 29. All of the lectures are on Tuesdays at 12:30 p.m. in Lecture Hall 3 of the Woodward Instructional Resources Centre.

The lectures will examine the way environmental pollutants or suspected carcinogens are regulated, the political and economic forces influencing these standards, and the impact standards have had on the public.

Andre Sobolewski, who is working on his doctoral degree in biology at UBC, is one of the persons behind the lecture series. Mr. Sobolewski said standards vary from country to country, sometimes by incredible margins.

He noted, for example, that Canada allows 400 times as much atmospheric fluorine than does the United States. One of the lectures, he said, deals with fluorosis among workers in Kitimat.

Here are the dates, titles and speakers for each of the 11 lectures:

Sept. 28 — Do We Need Standards and Regulations? Dr. William Stanbury, Commerce, UBC.

Oct. 12 — How Environmental Standards are Set and Enforced. Prof. Robert Franson, Law, UBC.

Nov. 2 — The Assessment of Risk. Dr. Philip Hill, head, Mechanical Engineering, UBC.

Nov. 9 — An Assessment of the Impact of Standards: A Discussion between Government, Labor and Industry. Chairperson will be Dr. John Leach, Toxicology Section, B.C. Research.

Nov. 22 — The Media and Standards. Peter von Stackelberg, Edmonton Journal.

Jan. 11 — Urea-Formaldehyde Foam Insulation: An Example of the Effects of Inadequate Standards Affecting the General Public. Prof. David Cohen, Law, UBC.

Jan. 25 — When a Standard is Inadequate in the Workplace: Fluorosis in Kitimat. Mr. Whiho Papenbrock, president, Canadian Association of Smelter and Allied Workers, Kitimat.

Feb. 8 — The Role of the Specialist and That of the Public in the Setting of Standards. Kim Roberts, West Coast Environmental Law Association; Leora Salter, Department of Communication, Simon Fraser University.

March 1 — Uses of Social Science Research in Setting Public Policy. (Speaker to be arranged.)

March 15 — A Philosopher's View: The Values in Cost/Benefit Analysis. Dr. Ed Levy, Philosophy, UBC.

March 29 — Can We Adopt Standards Established by Foreign Agencies? Dr. David Bates, Medicine, UBC.

## Long career in nursing recognized

Miss Margaret Street, an associate professor emerita of Nursing at UBC, was one of 62 Canadians appointed last month to the Order of Canada, this country's highest distinction, for recognition of achievement and service to the nation.

Miss Street, who was named a Member of the Order, is among six B.C. residents appointed. She will receive her decoration at Rideau Hall in Ottawa this fall.

Miss Street first taught in UBC's School of Nursing in 1952-53, and after serving as associate director of nursing at the Calgary General Hospital for eight years returned to UBC and resumed teaching in 1961.

Born in Toronto, Miss Street received a Bachelor of Arts degree from the University of Manitoba in 1928, then attended the Provincial Normal School in Winnipeg. She taught in various high schools in Manitoba until she turned to the field of nursing in the 1930's. She graduated from the Royal Victoria Hospital School of Nursing in Montreal and then took a Diploma in Teaching and Supervision from the McGill University School of Nursing in 1942. She also has a Master of Science degree from Boston University.

In addition to her work in nursing education, Miss Street served as executive secretary of both the Manitoba and Quebec provincial nursing associations and as president of the Alberta Association of Registered Nurses.

Miss Street said her appointment to the Order of Canada was a "totally unexpected honor" and was due, in no small measure, to the opportunities for service she received at UBC and the support and assistance of former colleagues.



Two women on campus received Good Show Pins from the B.C. ministry of tourism this summer for exceptional service to visitors to our province. Brigitte Haasz, left, a cashier in the SUB Way cafeteria in the Student Union Building, has been with UBC Food Services for seven years. Susan Fisher, a fourth-year creative writing student, conducted guided tours of the campus during the summer for the Department of Information Services.

# NEW AWARDS

The following student awards were approved at the Sept. 15 meeting of the UBC Senate.

**R.H. Clark Scholarship** — This scholarship of \$250, established in honor of Prof. R.H. Clark, a member of the Department of Chemistry from 1916 to 1948, and head from 1928 to 1948, will be awarded annually to a student completing the third year of a program in honors chemistry. (Available in the 1983/84 winter session.)

**Commerce Undergraduate Society Bursary** — A bursary in the amount of approximately \$600 has been made available by the Commerce Undergraduate Society, to assist a full-time student in the faculty demonstrating financial need. (Available in the 1983/84 winter session.)

**Geol Scholarship in Asian Studies** — A scholarship in the amount of \$250 has been made available by Dr. and Mrs. D.P. Goel in memory of her brother Mr. Om Prakash Agrawal. The award will be made on the recommendation of the department to a student majoring in Asian studies. (Available in the 1982/83 winter session.)

**Geol Prize in Medicine** — A prize in the amount of \$250 has been made available by Dr. and Mrs. D.P. Goel. The award will be made on the recommendation of the Faculty of Medicine to a student demonstrating overall excellence in the clinical disciplines in the final year. (Available in the 1982/83 winter session.)

**Hewlett-Packard Prize** — Hewlett-Packard (Canada) Ltd., offers two prizes annually, in the form of 41C calculators, to recognize excellence in the fields of electrical engineering and computer science. One calculator is awarded to a top graduating student in Computer Science. The awards are made on the recommendation of the two departments concerned, in consultation with Hewlett-Packard (Canada) Ltd. (Available in the 1981/82 winter session.)

**Lost and Found Bursaries** — One or more bursaries made possible by the sale of unclaimed goods from the campus Lost and Found will be awarded to deserving students. The award will be made in consultation with the Women Students' Office. (Available in the 1982/83 winter session.)

**Isabel Jane Lownsbrough Memorial Scholarship** — A scholarship in the amount of approximately \$500 has been made available by the late Isabel Jane Lownsbrough. The award will be made to a student in the Department of Music, with particular consideration given to scholastic achievement. (Available in the 1983/84 winter session.)

**Missouri Pacific Railroad Fellowships** — One or more fellowships to a total of \$10,000 per annum have been made available by the Missouri Pacific Railroad to support graduate students in the Faculty of Commerce and Business Administration. The awards will be made to students specializing in transportation. (Available in the 1982/83 winter session.)

**Monsanto Canada Incorporated Scholarship** — A scholarship in the amount of \$300, gift of Monsanto Canada Incorporated, will be offered annually to a student entering the final year in the Faculty of Agricultural Sciences. The award will be based on the work of the third year and is intended to encourage students to pursue studies in agricultural production, marketing and management. (Available in the 1982/83 winter session.)

## Senate approves new department

The UBC Senate has approved departmental status for Orthopedics. A motion by dean of Medicine Dr. William Webber "that the Division of Orthopedics in the Department of Surgery be changed to the Department of Orthopedics in the Faculty of Medicine" was approved by a large majority Sept. 15. A number of student senators were opposed to the change.

In response to student queries about possible increased expense, Dean Webber said he could not be specific but he felt the new department could be expected to ask for one additional faculty member and increased secretarial staff.

President Douglas Kenny, Senate chairman, pointed out that Senate's direct responsibility was for the academic implications of such a change. He emphasized that the proposal now would have to go to the Board of Governors, which would consider economic aspects.

**Nursing Undergraduate Society Sheena Davidson Memorial Bursary** — A bursary has been established in memory of Sheena Davidson, an assistant professor in the School of Nursing, who died in December, 1980. The award will be made annually to a nursing student who has completed second or third year with an overall average of 75 per cent or more and who demonstrates financial need. (Available in the 1982/83 winter session.)

**Physical Education and Recreation Faculty Prize in Physical Education** — A prize, in the amount of \$100, made available by the faculty of the School of Physical Education and Recreation is awarded to the head of the graduating class for the Bachelor of Physical Education degree. (Available in the 1981/82 winter session.)

**Physical Education and Recreation Faculty Prize in Recreation** — A prize, in the amount of \$100, made available by the faculty of the School of Physical Education and Recreation is awarded to the head of the graduating class for the Bachelor of Recreation Education degree. (Available in the 1981/82 winter session.)

**Harry and Marjorie Anne Slim Memorial Scholarship in Music** — A scholarship in the amount of \$1,000 has been made available by Dr. H. Colin Slim (B.A. 1951) to honor the memory of his parents. The scholarship will be awarded to an outstanding third or fourth year student in the Department of Music who is majoring in Music History and Literature: Music Theory or Performance (piano, voice, orchestral and historical instruments). (Available in the 1982/83 winter session.)

**Special University Prize (Head of the Graduating Class in B.Ed. Special Education)** — This prize will be awarded to the student standing at the head of the graduating class in the Bachelor of Education (Special Education). (Available in the 1982/83 winter session.)

**Dorothy M. Wallis Memorial Bursary** — One or more bursaries totalling approximately \$500 per annum have been made available by family and friends of the late Dorothy M. Wallis (M.Ed. UBC 1981). The award(s) will be made to a candidate working towards a Master of Education degree in English Education. If there are no qualified candidates, the award may be made to a student with a completed concentration or major in English who is proceeding to fifth year of the undergraduate secondary education degree program. (Available in the 1983/84 winter session.)

**Dr. Susan Joan Wood Memorial Scholarship** — This scholarship, in the amount of \$500, was established in memory of Dr. Susan Joan Wood, a former professor of English at this University and an accredited author. It is awarded each year to a student of high academic standing who is entering third or fourth year at this University and is registering for three or more units of studies in Canadian literature. Preference will be given to Canadian citizens or landed immigrants. (Available in the 1982/83 winter session.)

## Practical writing series set

UBC's Department of English is sponsoring a free, noon-hour series of practical writing lectures as an adjunct to its Practical Writing course (English 301). The noon-hour series has been organized to acquaint students with some of the specific writing practices and problems encountered in the day-to-day activities in business and professional worlds. The lectures, which run from October through March, feature speakers from a wide range of professional areas, including public relations, law, engineering, accounting, nursing, pharmacy, research, agriculture and forest management. The lectures take place on Tuesdays in Room 200 of the Computer Science Building at 12:30 p.m. The series opens on Oct. 5 with a talk by Mr. William Thompson, manager of corporate communications, Placer Development Ltd. He will speak on "Communicating Corporate Messages". Check the UBC Calendar section of this paper for weekly listings of the lectures.

# UBC CALENDAR

### Calendar Deadlines

For events in the weeks of Oct. 10 and Oct. 17, material must be submitted not later than 4 p.m. Sept. 30. Send notices to Information Services, 6328 Memorial Rd. (Old Administration Building). For further information, call 228-3131.

### The Vancouver Institute.



**Saturday, Sept. 25**  
NMR: A New Window on the Human Body: Medical Applications. Sir Rex Richards, former vice-chancellor, and professor of physical chemistry, Oxford University.

**Saturday, Oct. 2**  
Violence. Dr. Jolyon West, head, Department of Psychiatry, U.C.L.A.

Both lectures take place in Lecture Hall 2 of the Woodward Instructional Resources Centre at 8:15 p.m.

### SUNDAY, SEPT. 26

#### SUB Films.

*Chariots of Fire.* Admission is \$1. Second show at 9:30 p.m. Auditorium, Student Union Building. 7 p.m.

### MONDAY, SEPT. 27

#### Applied Mathematics Seminar.

The Evolution of a Resonant Oscillation in a Closed Tube. Prof. Michael P. Mortell, University College, Ireland. Room 229, Mathematics Building. 3:45 p.m.

#### Biochemistry Colloquium.

Human tRNA Genes — Isolation, Characterization, Modification. Dr. Ken Roy, Microbiology, University of Alberta. Lecture Hall 6, Woodward Instructional Resources Centre. 4 p.m.

### Astronomy Seminar.

Precision Radial Velocities of Bright Stars. Dr. Bruce Campbell, Canada-France-Hawaii Telescope, Hawaii. Room 318, Hennings Building. 4 p.m.

### TUESDAY, SEPT. 28

#### Assertiveness for Women.

The Women Students' Office is offering a five-week workshop on assertiveness training. Pre-registration by Sept. 24 in RobM 203 of Brock Hall. For more information, call 228-2415. Room 303, Brock Hall. 12:30 p.m.

#### IAESTE Meeting.

Application forms will be available. For information, call the Office of Co-operative Education and Internship Programs at 228-3022. Room 1212, Civil and Mechanical Engineering Building. 12:30 p.m.

#### Cecil and Ida Green Lecture.

Academic Excellence: The Future Roles in Universities. Sir Rex Richards, former vice-chancellor, Oxford University. Lecture Hall 6, Woodward Instructional Resources Centre. 12:30 p.m.

#### Science in Society Series.

Do We Need Standards and Regulations? Dr. William Stanbury, Commerce, UBC. Lecture Hall 3, Woodward Instructional Resources Centre. 12:30 p.m.

#### Oceanography Seminar.

The A.I.M.S. of Australian Oceanography. Professor emeritus George L. Pickard, Oceanography, UBC. Room 1465, Biological Sciences Building. 3:30 p.m.

#### Chemistry Lecture.

Transition-Metal Complexes Containing Nitrosyl, Thionitrosyl and Other Acceptor Ligands. Prof. M. Herberhold, Universitat Bayreuth, West Germany. Room 250, Chemistry Building. 4 p.m.

#### International House Film.

Three Canadian films: *Bill Reid; What the Hell is Going On Up There?; and The Hutterites* will be shown. Admission is free. International House. 8 p.m.

### Faculty Club.

Annual general meeting. Ballroom, Faculty Club. 8 p.m.

### WEDNESDAY, SEPT. 29

#### Noon-Hour Concert.

Martin Berinbaum, trumpet, with members of the UBC music faculty perform the music of Viviani, Albioni, Kraft. Recital Hall, Music Building. 12:30 p.m.

#### English Lecture.

The History of the Study of Books. Ian Willison, keeper of the books, British Library. Sponsored by the Committee on Lectures. Room 204, Buchanan Building. 12:30 p.m.

#### Classics Seminar.

Augustan Poetry and the Root of Evil: A Study of Avarice, etc. in Augustan Authors, especially Horace. Prof. Elaine Fantham, Classics, University of Toronto. Sponsored by the Committee on Lectures. Room 154, Buchanan Building. 3:30 p.m.

#### Statistics Workshop.

Assessing Multivariate Normality. Dr. Jim Koziol, Mathematics and Medicine, University of California, San Diego. Room 308, Angus Building. 3:30 p.m.

#### Geophysics and Astronomy Seminar.

Can Galenas Tell Us About Cratonization? Clues from Western Australia. Dr. John Richards, Australian National University, Canberra. Room 260, Geophysics and Astronomy Building. 4 p.m.

#### Animal Resource Ecology Seminar.

Preciousness, Cuckoldry and the Evolution of Alternative Reproductive Strategies in Fishes. Dr. Mart R. Gross, Biological Sciences, SFU. Room 2449, Biological Sciences Building. 4:30 p.m.

#### International House.

International House Folk Dance Club. Traditional dances and steps from many different countries taught at beginning and intermediate levels. Open to students, faculty, staff and community. Yearly fee is \$10; \$5 for students. For further information, call Marcia

Snider at 738-1246 (evenings) or Richard Spratley at 228-3652 (days). Upper Lounge, International House. 7:30 p.m.

### THURSDAY, SEPT. 30

#### Volunteer Fair.

Volunteer opportunities can be explored with more than 35 community agencies and institutions. Sponsored by Speakeasy, the Vancouver Volunteer Centre's Youth Involvement Program and UBC's Student Counselling and Resources Centre. Continues from 11:30 a.m. to 2:30 p.m. on Friday, Oct. 1. Lobby, Student Union Building. 11:30 a.m. - 2:30 p.m.

#### Classics Lecture.

Citizens and Immigrants in Greece and Rome. Prof. Elaine Fantham, Classics, University of Toronto. Sponsored by the Committee on Lectures. Room 104, Buchanan Building. 12:30 p.m.

#### Religious Studies Lecture.

Al-Hallaj, a Martyr of Mystical Love. Prof. Anne-Marie Schimmel, Harvard University and president of the International Association for the Study of World Religions. Sponsored by the Faculty of Arts Distinguished Visitors Program. Room 102, Buchanan Building. 12:30 p.m.

#### Amnesty UBC.

The Amnesty International Mandate. Room 212, Student Union Building. 12:30 p.m.

#### Decision-Making for Women.

The Women Students' Office begins a three-week workshop on effective decision-making strategies. For more information, call 228-2415. Room 106A, Brock Hall. 12:30 p.m.

#### Women in Commerce.

A panel discussion sponsored by the Women Students' Office. For more information, call 228-2415. Room 302, Brock Hall. 12:30 p.m.

Continued on Page 8

